DOCUMENT RESUME

ED 350 561 CS 011 037

AUTHOR Piper, Stephanie Gayle
TITLE A Metacognitive Skills/Reading Comprehension Intervention Program for Sixth Grade Social Studies Students.
PUB DATE Jul 92
NOTE 50p.; M.S. Practicum, Nova University.
PUB TYPE Dissertations/Theses - Practicum Papers (043) -- Tests/Evaluation Instruments (160)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS *Content Area Reading; Grade 6; Instructional Effectiveness; Intermediate Grades; Intervention; *Metacognition; *Reading Comprehension; Reading Improvement; *Reading Strategies; *Social Studies; Urban Education
IDENTIFIERS Gates MacGinitie Reading Tests

ABSTRACT

An intervention program in the area of sixth grade social studies was implemented for the purpose of increasing reading comprehension levels of average ability students in a large, urban school district. Five metacognitive strategies were employed to improve understanding of the adopted textbook. The strategies included outlining, sentence summaries, self-interrogation, the KWL strategy (derived from the phrases: "What we Know," "What we Want to find out," and "What we Learned"), and discourse as a mode of inquiry. Success was measured by comparing pretest and posttest scores. Results indicated improvement in reading comprehension skills as measured by the Qualitative Reading Inventory. Efficient use of metacognitive skills was demonstrated and measured by the Gates-MacGinitie Reading Test. Increased social studies grades were determined by an average score of three unit tests from the social studies text. It was concluded that instruction in the five metacognitive strategies improved the target group's reading comprehension abilities. (Four tables of data are included; 20 references and a proposed timeline for the practicum are attached.) (Author/RS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☑ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Stephanie Gayle Piper
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

ED350567

A METACOGNITIVE SKILLS / READING COMPREHENSION INTERVENTION PROGRAM FOR SIXTH GRADE SOCIAL STUDIES STUDENTS

by

Stephanie Gayle Piper

A Practicum Report

Submitted to the Faculty of the Center for Advancement of Education of Nova University in partial fulfillment of the requirements for the degree of Master of Science

The abstract of this report may be placed in a National Database System for reference.

July / 1992

CS011037

BEST COPY AVAILABLE

Abstract

A Metacognitive Skills / Reading Comprehension Intervention Program for Sixth Grade Social Studies Students
Piper, Stephanie G., 1992: Practicum Report, Nova University,
The Center for the Advancement of Education.
Descriptors: Metacognition / Reading Comprehension / Social Studies / Metacognitive Strategies / Learning Skills / Reading Strategies / Elementary Education

An intervention program in the area of sixth grade social studies was implemented for the purpose of increasing reading comprehension levels of average ability students in a large, urban school district of the Southeastern United States. Five metacognitive strategies were employed to improve understanding of the adopted textbook. The strategies included outlining, sentence summaries, self-interrogation, the KWL Strategy, and discourse as a mode of inquiry. Success was measured by comparing pretest and post-test scores from the Gates-MacGinitie Reading Test (Riverside Publishing, 1983), the Qualitative Reading Inventory, and the social studies unit tests.

The results indicated improvement in reading comprehension skills as measured by the Qualitative Reading Inventory. Efficient use of metacognitive skills was demonstrated and measured by the Gates-MacGinitie Reading Test. Increased social studies grades were determined by an average score of three unit tests from the social studies text. It was concluded that instruction in the five metacognitive strategies improved the target group's reading comprehension abilities. The appendices include the proposed timeline and tables of the results.

Table of Contents

	Page
Title Page	i
Abstract	ii
Authorship Statement	iii
Observer's Verification	iv
Table of Contents	v
Chapters	
I. Purpose	1
II. Research and Solution Strategy	8
III. Method	18
IV. Results	24
V. Recommendations	28
Reference List	30
Appendices	
Appendix A: Standard Achievement Test Results	33
Appendix B: Gates-MacGinitie Test Results	35
Appendix C: Qualitative Reading Inventory Results	37
Appendix D: Social Studies Unit Tests Results	39
Appendix E: Proposed Timeline	41
Attachments	43

CHAPTER I

Purpose

Essential to success in school as well as the professional or vocational circle is the knowledge of how to read. Equally important to this skill is comprehending the information one has read. Without these two abilities it would be challenging to advance in the classroom and in the world. One of the important goals of reading teachers, as cited by Crain (1988), is to create readers who are skillful and independent. As an aid to attain this goal, current research supports teaching metacognitive skills (Blachowicz, 1990). Proficient readers utilize their previous knowledge and literary skills and continually monitor their comprehension. It is imperative for students to know how to check their comprehension prior to being able to excel in reading.

The educational site at which the researcher conducted this practicum employs 48 regular kindergarten through sixth grade teachers. In addition, funds from the state allow for two pre-kindergarten classes. Fourth, fifth, and sixth grade Personalized Education Program

(PEP) and Laboratory for Individualized Foundation Teaching (LIFT) alternative education program instructors increase the staff population by four. There is a total of 67.2 instructional personnel including the part-time and full-time special resource teachers.

Aiming toward the improvement of all students, the educational site offers a variety of resource programs. All classes contain no more than 20 primary or 25 intermediate students. In addition to being a Chapter 1 school, courses for special students include Severely Emotionally Disturbed (SED), Emotionally/Mentally Handicapped (EMH), Emotionally Handicapped (EH), Severely Learning Disabled (SLD), Speech and Gifted. Currently, the majority of these classes are running full time in separate portables.

The school personnel work to provide 1220 students with opportunities for meeting their academic performance potential. With regard to ethnicity, 48 percent of the students are White, 39 percent are Black, 12 percent are Mexican-American, and 10 percent are Chinese-American. The children all live within the neighborhood, negating the need to bus in specific individuals to meet

segregation requirements. Approximately 78 percent receive free or reduced lunches as they come from below the average socio-economic level.

The researcher is a sixth grade volunteer teacher and master's degree student. Increasing vocabulary, historical knowledge, and reading comprehension levels are among the responsibilities of the researcher. It has been observed by the target group's regular classroom teachers that grades earned in social studies are the reflection of limited comprehension of the content area text. Therefore, the researcher's goal for the target group of average ability students was to improve reading comprehension.

Problem Statement

At the aforementioned school, all students in grades 1 through 6 were administered the Stanford Achievement Test (SAT). Children in grades three through six also took the Otis-Lennon School Ability Test (OLSAT). Overall percentile scores in reading totalled 29 for sixth graders (See Appendix A:33). These scores were comparitively lower than most other grade levels.
Upon notice of the relatively low SAT and OLSAT

scores, attention was then directed toward measuring current reading comprehension ability.

Upon review of academic curriculum grades, a large percentage of sixth graders earned average to low grades on social studies tests. The school's curriculum specialist and researcher were in agreement that there may be a direct relationship between lack of reading comprehension and low social studies grades. Based on these results and a request from school administration, the researcher focused on improving a target group of sixth grader's comprehension of the social studies text.

The sixth grade teachers selected students with low social studies test scores to participate in the program. Each of the four instructors chose six children giving the target group a total of 24 participants. This target group was administered the comprehension section of the Gates-MacGinitie Reading Test (Riverside Publishing, 1983) to determine the status of the students' approximate reading ability. The average score earned on the test was in the 52nd percentile (See Appendix B:35). When asked for possible causes of the low scores, the teachers' most common response was a lack of comprehension when reading. These same teachers continued

to report that each of the students was well disciplined in behavior. This is significant to note as time on task was not mentioned as a cause for low social studies grades.

The students of the target group were not earning social studies grades that reflected their ability because they struggled to comprehend the text. Ideally, students should be reading the social studies text independently with 80 percent comprehension according to the school's curriculum specialist. The discrepancy between the average score on the Gates-MacGinitie Reading Test (Riverside Publishing, 1983) and the ideal comprehension level was 28 percent. The ability to understand the main ideas and concepts would most definitely be reflected on tests. The teachers reported that the target students had the potential for improvement in the social studies content area. This was evidenced by grades earned in other subjects that do not heavily rely on independent reading as the method of instruction.

Outcome Objectives

There is a need for increasing comprehension of written materials if students are expected to progress academically. In an effort to attain this goal, objectives for the practicum implementation were as follows:

1. Following participation in the 12 week Metacognitive Skills/ Reading Comprehension Intervention Program (MSRCIP), 50 percent of the targeted sixth grade social studies students will demonstrate improved reading comprehension as measured by a score of 75 percent or higher on the Qualitative Reading Inventory, Level 6.

2. Following participation in the 12 week Metacognitive Skills/ Reading Comprehension Intervention Program, 50 percent of the targeted sixth grade social studies students will demonstrate efficient use of metacognitive skills as measured by a score at the 79th percentile or higher on the comprehension section of the Gates-MacGinitie Reading Test, Level D, Form 3 (Riverside Publishing, 1983).

3. Following participation in the 12 week Metacognitive Skills/ Reading Comprehension Intervention Program, 50 percent of the targeted group of sixth grade

social studies students will demonstrate increased grades in social studies as measured by an average score of 75 percent or higher on three unit tests from the textbook, Nations of the World.

CHAPTER II

Research and Solution Strategy

Books contain vast amounts of information. They are the key to our future success for the more one reads, the more knowledgeable one may grow. Therefore, the ability to read is an essential skill in the growing process.

Instruction in reading comprehension should be part of the content area curriculum in schools so that teachers can help students understand their texts. In a study conducted by Armbruster (1986) five social studies programs at the fourth and sixth grade levels, including the student textbooks and teachers' editions, were examined. The purpose of the study was to determine if reading comprehension instruction was provided and, if so, how much and what kind. Although the majority of publishers recognized the importance of reading in the social studies curriculum and claimed to teach reading-related skills, there was limited direct instruction for these skills. The minimal amount of instruction there was often seemed inadequate. Without the advantage of

instruction to students or teachers in how to apply them, the programs heavily relied on these skills. The implication here is that since reading skills instruction is not readily found in books, it needs to be taught.

One important skill for a reader is to be able to identify main ideas in texts since, conceivably, all information from content textbooks cannot be absorbed. The ability to extract the central points is directly related to the ability to comprehend the gist or main ideas of textbook prose. Current theory (Anderson, et al, 1985) suggests the reader must use several sources of information to construct main ideas. These include the reader's purpose and active schema as well as the author's purpose and text organization. This theory contradicts traditional approaches based on the premise that main ideas are inherent and can be found within the text (Jacobowitz, 1990).

Baumann (1983) conducted a study on the basis that children are not highly skilled at comprehending main ideas. The sample contained 83 third graders and 89 sixth graders from two schools in a suburban school district. Random passages from both social studies texts were selected.

> Results of the present study indicate that elementary children in a natural school environment after reading unaltered, content area textbook passages are (a) unable to consistently produce a statement that captures the gist or theme of the entire selection and (b) unable to consistently demonstrate superior comprehension of main ideas over details in either a written cued recall task or in a multiple choice test format (Baumann, 1983 : 328).

These findings suggest that students are not necessarily inherently skillful at tasks which require recalling or producing main ideas. The need is apparent for children to be effectively taught how to comprehend the main ideas in books.

A difference between good readers and poor readers is evident. Beginning and unskilled readers often fail to derive meaning from text. In contrast, good readers utilize metacognitive skills to monitor their understanding of text and use fix-up strategies to eliminate difficulties. Baker and Brown (1984) define metacognition as "the knowledge and control one has over his or her own thinking and learning activities, including reading". McLain (1991) recognizes reading as the "total process of interrelated skills and strategies". The ability to understand text is governed by a student's awareness of the thought processes and the sense of control of these processes. The difference

between reading comprehension (understanding content) and metacognition is that in the latter, the reader understands the he or she has understood the content.

Current researchers Baker and Brown as quoted by McLain (1989 : 170) break metacognition into three areas:

> (1) cognitive awareness : a person's knowledge about his/her own cognitive resources and an evaluation of the reading task to be accomplished
> (2) self-regulatory mechanisms (cognitive monitoring) : a person's ability to actively regulate what they know during reading (comprehension monitoring) and problem solving, and
> (3) compensatory strategies : a person's use of fix-up strategies during the actual reading process.

Generally, poor readers are not aware that they must attempt to make sense out of text. When students become aware of their own learning processes, they can diagnose their needs and apply metacognitive strategies to change their deficiencies. In turn, facilitating these processes will result in significantly elevated reading comprehension (Guthrie, 1983).

Recent research strongly supports the use of metacognitive skills as a means to improve reading comprehension. Strategies to monitor comprehension are essential to efficient reading. This research is the basis for the writer's proposal to directly instruct the aforementioned target group in the area of metacognitive

skills to improve reading comprehension of the social studies textbook.

When comprehension fails and the text does not make sense, teachers have the obligation to help students learn how to approach the reading task. Schmitt (1990) conducted a study to analyze elementary teachers' interaction with students to determine the extent teachers promote students' metacomprehension abilities. It was shown that during guided reading of basal selections in ten classes representing grades 1-6, teachers did very little to foster such skills. Schmitt concluded that the "...procedures related to metacomprehension that were detected revealed that the teachers assumed most of the responsibility for students' comprehension themselves rather than directing students to engage in metacomprehension strategies or conducting the lessons in a manner that promoted metacomprehension abilities."

The related literature offers multiple strategies used by successful readers that may be beneficial to create skilled, independent readers from current poor readers. However, a choice few strategies were selected for the Metacognitive Skills / Reading Comprehension

Intervention Program that were instructed over the 12 week implementation period. The five metacognitive strategies, all created to aid students understand their own mental processes and monitor their comprehension of text, include outlining, sentence summaries, self-interrogation, the KWL Strategy, and discourse as a mode of inquiry.

Outlining is simply one form of student-generated study aids. Bean (1986) noted the conclusion that students who did not know the outlining procedure would do as well simply rereading text assignments. Despite the conclusion, "...When students receive explicit instruction in outlining...their comprehension and retention of information usually outpaces that of untrained peers". Higher social studies test scores were achieved by students taught outlining skills than a matched control group that did not receive outlining instruction. The outlining approach was one metacognitive ability that was used to markedly benefit the target group.

Secondly, students were taught to omit trivial and repetitive information in order to identify main ideas in textbook passages. Then they used general vocabulary

words to classify the relevant data into sentence summaries. This procedure is recommended by Tregaskes (1989).

Research has shown (Taylor, et al., 1985) that teachers virtually do not give reading instruction during social studies. Too often students are required to complete main idea worksheets with basal reader material which is different from reading textbooks for main ideas. Taylor performed two experiments with upper elementary grade readers. Results suggest that although they performed well on main idea worksheets, they, in fact, may have difficulty transferring this ability while reading for main ideas with actual textbook material. This would suggest that worksheets are not enough and that direct instruction in a skill such as summarizing is needed. It is also important to note that Taylor (1989) conducted a study of sixth graders which indicated that students who received main idea and important details instruction had better recall of their texts than students who did not receive instruction. Head (1989) supports the theory that when a gist is desired, summaries are an appropriate measure to be used.

A third metacognitive strategy taught was self-interrogation or self-questioning which deals with the individual monitoring comprehension. Cohen (1985) recommends having students reflect on concepts introduced and passage organization prior to reading. When students read from one subsection to another, they can ask themselves about their understanding of main ideas and consider how each section relates tc the next. The self-questioning strategy is specifically noted to benefit low and middle ability students (Sanacore, 1984).

Often times teachers ask students to identify the main idea of a story or text passage. Instead, they should ask how the main idea was determined. Heller (1986) emphasizes that the latter question would require articulation of the students' metacognitive strategies.

Incorporated in the self-interrogation technique is a simple strategy called look-back (Flood, 1984). Students are encouraged to reinspect their text when what they read does not make sense. With this strategy, the student rereads the vaguely understood material and monitors for comprehension. When learners self-question, it helps them to find main points, look back in the text, and reflect on what they have read.

The fourth metacognitive technique implemented is called the KWL Strategy. Students complete a study guide with three columns titled "What we know", "What we want to find out", and "What we learned". Work is done individually or in small groups by responding to columns one and two before reading a passage and column three after reading. This technique is a common method used by teachers to help students activate their schema prior to reading, improve comprehension during reading, and organize their thoughts following reading.

The final strategy included in the Metacognitive Skills / Reading Comprehension Intervention Program involved the students cognitively, affectively, and physically. Participants combine their knowledge of a historical event with critical thinking to elaborate a situation and dramatize an event. As noted by Philbin (1991), "Dramatic improvisation followed by reflection gives students practice in reasoning, accepting ambiguity, acknowledging the validity of divergent perspectives, and experienceing directly the process of arriving at valid conclusions". This form of learning actively involves the child and, in turn, increases the

desire to find out more information on the proposed topic by reading the textbook and comprehending the main ideas.

As students use these combined metacognitive strategies, they become more independent in their reading process. The teacher gradually relinquishes direct control and assumes only a limited role for monitoring student comprehension. As the student takes on increased responsibility for his or her own comprehension and use of fix-up strategies, "...the goal of an independent, skilled reader becomes a reality" (McLain, 1991).

CHAPTER III

Method

Throughout the twelve week implementation period, the target group, consisting of 24 students, met with the researcher for 30 minutes each day. In an attempt to reduce discipline problems, individualize learning, and improve space limitations, the target population was separated by homeroom teachers into two groups. Each group met at different times of the morning. However, aside from the difference in meeting time, the assignments and methods of teaching were identical. Instruction was conducted in a variety of settings including the school cafeteria, a portion of the classroom for gifted students, and outdoors.

Prior to instruction, the Gates-MacGinitie Reading Test (Riverside Publishing, 1983) and the Qualitative Reading Inventory were administered to determine comprehension levels before any intervention. The implementation period was divided into three sections of approximately four weeks each. During each section, one

unit from the textbook, Nations of the World, (Macmillan Publishing Company, 1987) was read and tested. Within each unit of instruction, the five metacognitive strategies of the Metacognitive Skills / Reading Comprehension Intervention Program were incorporated. In review, these include outlining, sentence summaries, self-interrogation, the KWL Strategy, and discourse. Each technique was introduced and taught in depth during the first unit. The students had individual and small group practice time, as well as homework, for each technique. Assignments were collected at each group session so they could be checked orally by the entire class and teacher. Remediation was applied as the need arose.

Following implementation of the MS/RCIP, the Gates-MacGinitie Reading Test (Riverside Publishing, 1983) and the Qualitative Reading Inventory were readministered to the target group. Statistics from these two measures, as well as the average scores from the unit tests, were analyzed. Results will be discussed in detail in Chapter 4.

The following discussion highlights the activities which were implemented with the target group. For a proposed timeline see Appendix E:41.

During the first week, the purpose and expectations of the program were explained to the students. To introduce the KWL Strategy, the class was broken into three groups and assigned the task of listing what was known about India and Southeast Asia as this was the first unit to be taught. Next, a list was made of what the students wanted to know. The lists were shared with the whole group and a class list was constructed. Vocabulary for Unit 3 of the social studies text, Nations of the World (Macmillan Publishing Company, 1987) was defined and practiced by matching word cards with meaning cards in a game. Interpretation of a map and questions on geography and topography followed. The class was separated into two groups, the elite and the untouchables, to demonstrate the caste system of India. Students were introduced to the outlining procedure (Bean, 1986) and showed effective use of this technique using the first section, "Land and People of Southern and Eastern Asia".

Geography and History were the focus for the second week. The class was separated into two teams and told to make questions for a competitive game. Each team asked each other questions related to the reading material to

try and stump each other. Students learned how to summarize sentences (Tregaskes, 1989). A continuous outline of the entire unit was started. Critical thinking was encouraged while the self-interrogation strategy (Sanacore, 1984) was implemented. Individuals read the text and asked themselves if the material was understood. Then the information from the text was questioned.

During the third week of implementation, the countries of Southeast Asia, including the land and its people, were covered. Students colored and labeled maps. Responsibilities increased as the students took charge of writing personal outlines and continued to form sentence summaries. Library research began as each student chose a historical figure to learn more about. At the end of the week, individuals dressed in costume and brought in props to imitate the chosen figures as bibliographic sketches were read to the class.

Students were challenged in the fourth week to review facts from the text and incorporate ideas in group "rap" sessions. Summary sentences were the focus for this week because a large percentage of the class did not show mastery in this technique. A children's storybook was employed to reteach this concept and practice as a

whole class. A game similar to the television game show "Jeopardy" was played with questions from the unit. Students took the Unit 3 test.

Greece and the Balkans were the topic for weeks five through eight. Prior to beginning the unit the students each received a KWL Strategy worksheet. Individuals were required to fill in the first column about what was already known regarding the topic. The column dealing with what was learned was filled out following completion of each section. Students learned vocabulary by playing a game in which terms must be matched with meanings. The entire unit was outlined by each student as taught in the previous unit. Summary sentences were written for each subsection to help prepare for the unit test. Students held a round table discussion where they challenged each other by posing and answering critical thinking questions regarding the unit. Each student chose a famous Greek from the text, researched in the library, and performed a dramatization while the rest of the class guessed who was being portrayed. After learning about the Greek athletes and the attention many Greeks payed to their bodies, a class version of the Greek Olympics were held. To review the unit, a game similar to "Jeopardy" was

played using teacher-devised questions. The Unit 5 test was administered.

During weeks nine through twelve, the primary focus for this unit was on Ancient Rome and Modern Italy. The five metacognitive strategies used in the two previous previous units were again implemented. The concentration was on the students' ability to monitor their comprehension while reading from the social studies text. Outlines and summary sentences were written. Students completed a KWL Strategy worksheet for the unit. Individuals were alloted class time to spend in the library to locate a Greek or Roman myth of their choice. Summaries of the myths were presented to the class. There was an international food day in which students, with the help of some parents, prepared foods representative of the countries studied. A review session took place in the form of a game similar to "Jeopardy". The Unit 6 test was administered. Following completion of the MS/RCIP, the Gates-MacGinitie Reading Test and the Qualitative Reading Inventory were readministered as post tests.

CHAPTER IV

Results

The focus for this chapter is on evaluation of the results. The program was implemented primarily for the purpose of improving reading comprehension skills in the target group of sixth grade social studies students. Implementation took place during the spring semester of the 1991-1992 academic school year in a large, urban school district of the Southeastern United States.

Objective number one was met when 50 percent of the targeted students demonstrated improved reading comprehension as measured by a score of 75 percent or higher on the Qualitative Reading Inventory (QRI), Level 6. In reality, approximately 83 percent of the group achieved or exceeded this objective (See Appendix C:37). The inventory required students to first read a passage two or three paragraphs in length. In this case it referred to computers. Next, the facilitator removed the passage from view and administered a list of six to eight questions. The number of questions varied according to

which passage was chosen. Students answered the questions from memory to the best of their abilities. Answers were then graded for accuracy and students categorized at the independent, instructional, questionable, or frustrational level according to the percentage correct. Final results showed that no student completing the QRI was labeled at the frustrational level.

Objective number two was met when 50 percent of the targeted group demonstrated efficient use of metacognitive skills as measured by a score at the 79th percentile or higher on the comprehension section of the Gates-MacGinitie Reading Test, Level D, Form 3 (Riverside Publishing, 1983). Only two students out of the entire class achieved this score during the first administration of the GMRT. However, following implementation of the MS/RCIP, 14 students accomplished this objective (See Appendix B:35). The test consisted of a series of short paragraphs followed by comprehension questions. Students were permitted to look back at the text to answer the multiple choice questions. This task was practiced during the entire program when the class answered questions from the end of each chapter. During the test, the students were under a time constraint which added pressure that

was not apparent during most class assignments. In summary, the majority of the class demonstrated efficient use of the metacognitive skills.

Objective number three was met when 50 percent of the targeted group of sixth grade social studies students demonstrated increased grades in social studies as measured by an average score of 75 percent or higher on three unit tests from the textbook, Nations of the World. Fifteen of the students who took all three unit tests met this objective (See Appendix D:39). Four students were not able to complete the three unit tests due to absences, although they each missed only one unit test. The lowest average of all three unit tests was 45 percent and the highest was 94 percent. One possible reason for the vast difference was motivation. Several students applied themselves in class as well as at home. Many individuals took it upon themselves to do extra research on the countries studied using computers and encyclopedias. The researcher observed positive attitudes demonstrated by the highly motivated students which in turn may have affected their unit test scores.

In addition to the three written test forms, the researcher evaluated students on the basis of their

critical thinking, or higher order, questions, as well as their participation in the classroom drama activities. During round table discussions and class "rap" sessions, the researcher placed a check by each students' name when a critical thinking question was asked or answered. Toward the end of the session if the researcher noticed an absence of checks for a particular student, a critical thinking question was directed toward this individual. This ensured that all group members contributed to the discussion.

In summary, all of the objectives of the program were met. Students achieved improved reading comprehension, efficient use of metacognitive skills, and increased social studies grades. In addition, participants in the program demonstrated use of critical thinking questions.

CHAPTER V

Recommendations

At the conclusion of the practicum implementation, the writer devised a report for classroom teachers at the educational site. The letter briefly explained the purpose and steps of the Metacognitive Skills / Reading Comprehension Intervention Program. It included statistical evidence of the program's success in meeting the stated objectives as well. Since positive results were produced from the program, it was recommended to the teachers that they utilize all or some of the metacognitive techniques in their own areas of teaching. If the demand is evident, an afternoon workshop will be organized to advise others how to use the MS/RCIP in their classrooms. Also, results were shared with the county reading supervisor.

To improve this program, the investigator recommends establishing an environment conducive to learning prior to implementation. Both teacher and students should feel comfortable in an atmosphere that is quiet, well lit, and

spacious. In addition, the researcher proposes an extended amount of time to be alloted for the daily sessions. Incorporating computerized lessons to practice reading comprehension skills may prove advantageous as well.

Reference List

Anderson, R.C., et al. Becoming a Nation of Readers. Washington, D.C. : The National Institute of Education, 1985.

Armbruster, Bonnie B. "Reading Comprehension Instruction in Social Studies Programs." Reading Research Quarterly, Winter 1986, pp. 36-47.

Baker, L., and A.L. Brown. "Metacognitive Skills and Reading." In P. David Pearson, Ed. Handbook of Reading Research. New York : Longman, Inc., 1984.

Baumann, James F. "Children's Ability to Comprehend Main Ideas in Content Textbooks." Reading World, May 1983, pp. 322-329.

Bean, Thomas W., et al. "The Effect of Metacognitive Instruction in Outlining and Graphic Organizer Construction on Students' Comprehension in a Tenth-Grade World History Class." Journal of Reading Behavior, 1986, pp. 153-167.

Blachowicz, Camille L.Z., and B. Zabroske. "Context Instruction : A Metacognitive Approach for At-Risk Readers." Journal of Reading, April 1990, pp. 504-508.

Cohen, Suzette F. "Comprehension Monitoring Strategies for Whole Text." Paper presented at the 29th annual meeting of the College Reading Association, Pittsburgh, PA, 1985.

Crain, SueAnn K. "Metacognition and the Teaching of Reading." Journal of Reading, April 1988, pp. 682-685.

Flood, J., Ed. Understanding Reading Comprehension : Cognition, Language and the Structure of Prose. Delaware : International Reading Association, 1984.

Guthrie, J.T. "Children's Reasons for Success and Failure." The Reading Teacher, 1983, pp. 478-480.

Head, Martha H., J.E. Readence, and R.R. Buss. "An Examination of Summary Writing as a Measure of Reading Comprehension." Reading Research and Instruction, 1989, pp. 1-10.

Heller, Mary F. "Achieving a Purpose for Reading : The Metacognitive Strategies of Reading Methods Students." In The National Reading and Language Arts Educators' Conference Yearbook, pp. 5-10. Kansas City, MO : 1986.

Jacobowitz, Tina. "AIM : A Metacognitive Strategy for Constructing the Main Idea of Text." Journal of Reading, May 1990, pp. 620-623.

McLain, Victoria. "Metacognition in Reading Comprehension : What It Is and Strategies for Instruction." Reading Improvement, Fall 1991, pp. 169-171.

Philbin, Meg,and J.S. Myers. "Classroom Drama : Discourse as a Mode of Inquiry in Elementary School Social Studies." The Social Studies, October 1991, pp. 179-182.

Sanacore, Joseph. "Metacognition and the Improvement of Reading : Some Important Links." Journal of Reading, May 1984, pp. 706-712.

Schmitt, Maribeth C., and J. Baumann. "Metacomprehension During Basal Reader Instruction : Do Teachers Promote It?" Reading Research and Instruction, 1990, pp. 1-7.

Taylor, Barbara, et al. "A Comparison of Students' Ability to Read for Main Ideas in Social Studies Textbooks and to Complete Main Idea Worksheets." Reading World, March 1985, pp. 10-15.

Taylor, Barbara M. "Improving Middle-Grade Students' Reading and Writing of Expository Text." Journal of Educational Research, May 1989, pp. 119-124.

Tregaskes, Mark R., and D. Daines. "Effects of Metacognitive Strategies on Reading Comprehension." Reading Research and Instruction, 1989, pp. 52-59.

APPENDICES

Appendix A

Standard Achievement Test Results

Appendix A

Table 1

Results of the Standard Achievement Test
for the Target Group

Student	SAT%ile
1	33
2	40
3	61
4	34
5	28
6	47
7	29
8	33
9	31
10	38
11	**
12	28
13	55
14	**
15	51
16	14
17	09
18	57
19	**
20	71
21	73
22	84
23	17
24	25

** Not Tested

Appendix B

Gates-MacGinitie Reading Test Results

Appendix B

Table 2

Results of the Gates-MacGinitie
Reading Test for the
Target Group

Student	Pretest	Posttest
1	31	70
2	34	84
3	63	82
4	47	84
5	30	68
6	70	94
7	36	76
8	58	92
9	45	94
10	58	78
11	53	82
12	32	52
13	71	74
14	45	96
15	63	94
16	40	52
17	21	60
18	58	94
19	58	90
20	85	98
21	54	88
22	79	**
23	50	76
24	56	84

** Not Tested

Average Pretest GMRT%ile = 52

Appendix C

Qualitative Reading Inventory Results

Appendix C

Table 3

Results of the Qualitative Reading Inventory for the Target Group

Student	Pretest	Posttest
1	Quest.	Inst.
2	Inst.	Inst.
3	Ques.	Ind.
4	Ind.	Inst.
5	Ques.	Ques.
6	Ques.	Inst.
7	Ques.	Inst.
8	Ques.	Inst.
9	Ques.	Inst.
10	Inst.	Ind.
11	Ques.	Ques.
12	Ques.	Ques.
13	Inst.	Inst.
14	Inst.	Ind.
15	Ques.	Inst.
16	Ques.	Inst.
17	Frus.	Inst.
18	Inst.	***
19	Inst.	Ind.
20	Inst.	Ind.
21	Inst.	Inst.
22	Inst.	Inst.
23	Ques.	Ind.
24	Inst.	Inst.

Ind. = Independent Inst. = Instructional
Ques. = Questionable Frus. = Frustrational

*** Not Tested

Appendix D

Social Studies Unit Tests Results

Appendix D

Table 4

Results of the Social Studies Unit Tests for the Target Group

Student	Pretest	Test 1	Test 2	Test 3	Average
1	65	75	94	76	82
2	55	75	94	79	83
3	57	65	94	55	71
4	67	63	90	86	80
5	62	70	62	100	77
6	70	100	96	83	93
7	54	45	51	40	45
8	72	**	90	73	82
9	79	85	88	56	76
10	78	65	92	79	79
11	38	70	90	**	80
12	73	95	82	70	82
13	58	**	88	90	89
14	58	75	90	**	83
15	65	85	96	88	90
16	52	48	78	32	53
17	48	65	90	49	68
18	58	95	96	94	95
19	97	95	100	88	94
20	95	95	76	90	87
21	92	93	100	61	85
22	88	87	96	82	88
23	76	83	90	55	76
24	84	80	58	58	65

** Not Tested

Appendix E

Proposed Timeline

Appendix E

Proposed Timeline

Week One The purpose for the program and expectations will be explained to the students. Vocabulary for Unit 3 of the social studies text, Nations of the World (Macmillan Publishing Company, 1987) will be taught. Since the unit is on India and Southeast Asia, the author will dress up in a toga and and give overview. The KWL Strategy Worksheet will be given to each student to be filled out with group assistance. Students will be introduced to the outlining procedure (Bean, 1986) and will demonstrate efficient use of this technique using th first section, "Land and People of Southern and Eastern Asia".

Week Two Geography and History of the area will be the focus. Students will learn how to summarize sentences (Tregaskes, 1989). A continuous outline of the entire unit will be made. Critical thinking will be encouraged while the self-interrogation strategy (Sanacore, 1984) is implemented. Students will read text and ask themselves if they understand what they have read. Once this is achieved, they will question what they have read.

Week Three The countries of Southeast Asia, including the land and its people, will be covered. Students' responsibilities will increase as they take charge of writing personal outlines and continue to write sentence summaries. Content area questions will be answered.

Week Four Students will be challenged to review facts from texts and incorporate creative ideas to dramatize a person from Southeast Asia (Philbin, 1991). Review of oulines and summary

sentences will be the focus. A game similar to the television game show "Jeopardy" will be played with questions from the unit. Students will take the Unit 3 test.

Weeks Five through Eight — Greece and the Balkans will be the topic for these weeks. Students will learn vocabulary by playing a vocabulary game in which they must match terms with meanings. Prior to beginning the unit the students will each receive a KWL Strategy worksheet. They will be required to fill in the first column about what they already know regarding the topic and the second column referring to what they would like to know regarding the topic. The column dealing with what they learned will be filled out after completing each section. The entire unit will be outlined by each student as taught in previous unit. Summary sentences will be written for each subsection to help prepare for the unit test. Students will hold a round table discussion where they will be challenged to ask and answer critical thinking questions regarding the unit. Each student will choose a famous Greek from the text and perform a dramatization while other students try to guess who is being portrayed. To review the unit a game similar to "Jeopardy" will be played using teacher-devised questions. The Unit 5 test will be administered.

Weeks Nine through Twelve — Students will learn about Ancient Rome and Modern Italy. The five metacognitive strategies used in the two previous units will again be implemented. The focus will be on the students' ability to monitor their comprehension while reading from the social studies text. They will write outlines and summary sentences and complete a KWL Strategy Worksheet. A round table discussion will be held to discuss the key points of the unit and allow for critical thinking questions to be asked and answered. Students will summarize a Roman myth of their choice and present it to the class. Once again, a review session will take place in the form of

a game similar to "Jeopardy". The Unit 6 test will be administered.

*** The Gates-MacGinitie Reading Test (Riverside Publishing, 1983) and the Qualitative Reading Inventory will be readministered as post tests.

Critical Thinking and Self-Reflection Checklist

The GEM Practicum Internship

John Barell - (Adapted)

Using a scale of 1 to 5, rate your work setting according to the following items:

5=Very Often 4=Often 3=Sometimes 2=Seldom 1=Rarely

CLASSROOM

1.	When students pose unusual or divergent questions, I ask, "What made you think of that?"	5 (4) 3 2 1
2.	Information in the text is challenged.	5 4 (3) 2 1
3.	When a decision has to be made between involving the class discussion of an intriguing student idea (topic related) or moving on to "cover" content, I choose the former.	(5) 4 3 2 1
4.	I encourage participants to seek alternative answers.	(5) 4 3 2 1
5.	The target group receives positive reinforcement for initiating questions.	5 (4) 3 2 1
6.	Problems are used as a means for the target group to generate their own questions (or problems), which we then seriously consider.	5 4 (3) 2 1
7.	Teaching and learning occur without teacher talk.	(5) 4 3 2 1
8.	Most questions posed during class can be answered with short or one-word answers.	5 4 (3) 2 1
9.	Students spontaneously engage in critiquing each other's thinking.	5 4 (3) 2 1
10.	Students are encouraged to relate subject matter to experiences in other subjects or to their personal lives.	5 (4) 3 2 1

11. I stress how to think, not what to think.	5	(4)	3	2	1
12. Students often set objectives for their own learning.	5	4	(3)	2	1
13. Students spend time working collaboratively to solve subject matter questions.	(5)	4	3	2	1
14. One focus in my implementation is trying to help others understand how and why people (mentioned in texts) created ideas, solutions, experiments, rules, principles, and so on.	5	(4)	3	2	1
15. Students actively listen to each other.	(5)	4	3	2	1
16. I facilitate collaborative instructional problem solving.	5	(4)	3	2	1